A NEW TEXAS CLEARWING MOTH (SESIIDAE: SESIINAE)

THOMAS D. EICHLIN

Insect Biosystematics Laboratory, Division of Plant Industry, Department of Food and Agriculture, Sacramento, California 94271-0001

ABSTRACT. A new species of clearwing moth, *Carmenta flaschkai*, from Fort Davis, Texas is described. The male genitalia are illustrated.

Additional key words: Carmenta flaschkai, C. verecunda, Synanthedon canadensis, sex attractant, couplet.

Since the recent publication of a revision of North American Sesiidae (Eichlin & Duckworth 1988), a small series of male clearwing moths from Fort Davis, Texas were sent to me for identification. Generally, they resemble specimens of *Carmenta verecunda* (Hy. Edwards). However, they differ in certain color patterns and basic structural details of the genitalia.

Carmenta flaschkai, Eichlin, new species (Figs. 1-3)

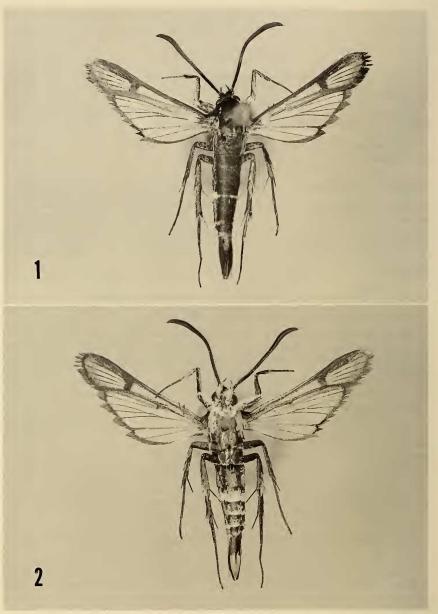
Description (male only, Figs. 1 & 2). Head and vertex brown-black, overlapping front; front gray-black or white, laterally white, white at base of antennae; occipital fringe dorsally mixed pale yellow and brown-black, laterally white; antennae brown-black; labial palpus thickened, somewhat roughened ventrally, white with brown-black laterally and apically. Thorax brown-black, pale yellow to white in patch beneath wing and in tuft above and behind wing base, very narrow orange, subdorsal, longitudinal stripe. Abdomen brown-black, dorsally with narrow, pale yellow or white bands on posterior of segments 4, 6 and 7; ventrally strongly banded pale yellow or white on 4-7, white variously on other segments; anal tuft dorsally brown-black with yellow-orange medially, ventrally yellow-orange. Legs brown-black with white on forecoxa; tibiae white on proximal half dorsally and laterally, with some white tufted distally. Fore wing with hyaline areas in cell and distally mostly covered with opaque white scales, margins and discal spot brownblack, apical margin variously broad and suffuse, pale orange on posterior margin and on posterior edge of cell. Hindwing hyaline but with somewhat cloudy (milky) translucence. Wing length 8-9 mm (one specimen 7 mm). Genitalia (Fig. 3) with saccus elongate, more than one third length of valva; scopula androconialis long, slightly longer than

Types. Holotype, male, (USNM): "TX, Jeff Davis Co., Ft. Davis, 11.IX.91, lg. D. Marqua, 99:1."

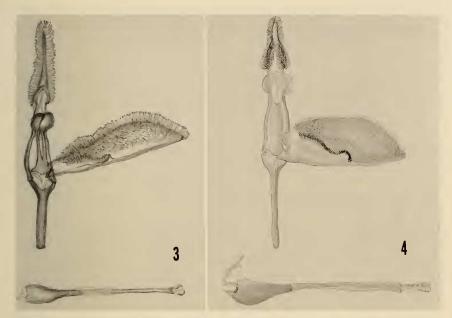
Paratypes, 15 males, (USNM, CDFA, CAS, Flaschka): (15) same as holotype except: (1) Genitalia Slide, CDFA #811, by S. A. Kinnee; (1) 29.VIII.91, L-103; (1) 9.IX.91; (1) 15.IX.91; (1) 1.X.91; (2) 2.X.91; (3) 5.X.91; (5) 14.X.91 (1 with Genitalia Slide, CDFA #816).

Distribution. Known only from the type locality: Fort Davis, Jeff Davis Co., Texas.

Discussion. Carmenta flaschkai is similar in appearance to C. verecunda, in particular the form described as hirsuta Englehardt. The latter form also was described from the same general area—Davis Mountains, Texas. However, C. flaschkai has pale orange near the



Figs. 1–2. Male, $Carmenta\ flaschkai\ (wing length 8 mm)$. 1, Dorsal view. 2, Ventral view.



FIGS. 3-4. Male genitalia (aedeagus detached). 3, Carmenta flaschkai. 4, C. verecunda.

forewing base extending distally on Cu and the anal margin; additionally, the male genitalia has the scopula androconialis elongated (Fig. 3), this structure being much reduced on *C. verecunda* (Fig. 4).

Because of the orange scaling on the anal tuft, especially ventrally, *C. flaschkai* will not key out with *C. verecunda* (Eichlin & Duckworth 1988:69, couplet 8) but runs to couplet 10 with *Synanthedon canadensis* Duckworth and Eichlin. Hence, an additional couplet is required:

The type series was collected with the aid of a chemical sex attractant consisting of a mixture (99:1) of (Z, Z/E, Z) 3,13-octadecadiene-1-ol acetate (ODDA).

This species is named for Hermann Flaschka, of Decatur, Georgia, in recognition of the contributions he has made to my studies of the Sesiidae through sharing his specimens, data, and collecting experiences.

ACKNOWLEDGMENTS

I thank Dave Marqua for collecting the type series and Hermann Flaschka for making the specimens available to me for examination. Technical expertise was provided by my

assistant Scott Kinnee. The drawing of the genitalia of *C. verecunda* was originally rendered by Laura Keller (Duckworth & Eichlin 1978).

LITERATURE CITED

Duckworth, W. D. & T. D. Eichlin. 1978. The clearwing moths of California (Lepidoptera: Sesiidae). Occas. Papers Entomol., Calif. Dept. Food & Agric., No. 27:1–80. Eichlin, T. D. & W. D. Duckworth. 1988. Sesioidea: Sesiidae, fasc. 5.1:1–176. *In* Dominick et al. (eds.), The moths of America north of Mexico. E. W. Classey and The Wedge Entomol. Res. Found., London.

Submitted for publication 11 February 1992; revised and accepted 21 June 1992.